ABSTRACT

_____ 16≟ The present invention provides an apparatus and method for automated and rapid loading of a large number of samples for mass spectrometric analysis using various ionization methods (e.g. matrix assisted desorption by laser bombardment (MALDI) and atmosperic pressure ionization (API) methods such as electrospray). The aparatus utilizes microtiter plates to hold the sample, optical elements (e.g. fiber optic) to facilitate automated transport of the ions, and a multiple part capillary comprising at least two capillary sections joined with airtight seal by a union for use in mass spectrometry (particularly with ionization sources) to transport ions between pressure regions of a mass spectrometer for analysis is described herein. Preferably, the capillary is useful to transport ions from an elevated pressure ionization source to a first vacuum region of a mass analysis system.